

CMPE 230 Systems Programming Final Exam Answers, Spring 2023

<p><u>Problem1:</u></p> <pre> a) prog.exe 2> /dev/null b) ./prog.exe & c) chmod 751 datafile d) prog.exe tee -a out.txt e) ar rcs libveli.a /home/veli/PROJ/*.o f) ssh veli@mach1.cmpe.boun.edu.tr g) man gcc h) ls -a i) kill -9 321 </pre>	<p><u>Problem3:</u></p> <p>Postfix notation: <code>addr-a 2 val-a + val-a * a + =</code></p> <p>Assembly code must be written by each student (similar to code in slides 06-assembly2.pdf page 14)</p>
<p><u>Problem2:</u></p> <pre> 8 2 4 6 12 8 8 7 18 21 </pre>	<p><u>Problem4:</u></p> <pre> #include <stdio.h> int main() { int a, b, c ; a = 7 ; b = 4 ; c = 5 ; a = b * a ; b = b + c ; c = c + a ; a = b - c ; return(0) ; } </pre>
<p><u>Problem5:</u></p> <pre> #include <QApplication> #include "FindDialog.h" int main(int argc,char *argv[]) { QApplication app(argc,argv) ; FindDialog f ; f.show() ; return app.exec() ; } #include <QWidget> #include "ui_FindDialog.h" class FindDialog : public QWidget { Q_OBJECT public: FindDialog() ; signals: void findNext(const QString &str, Qt::CaseSensitivity cs); void findPrevious(const QString &str, Qt::CaseSensitivity cs); private slots: void findClicked(); </pre>	

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    void enableFindButton(const QString &text);

private:
    Ui::Form ui ;

} ;

#include <QWidget>
#include "FindDialog.h"

FindDialog::FindDialog() : QWidget()
{
    ui.setupUi(this) ;

    connect(ui.lineEdit, SIGNAL(textChanged(const QString &)),
            this, SLOT(enableFindButton(const QString &)));
    connect(ui.findButton, SIGNAL(clicked()),
            this, SLOT(findClicked()));
    connect(ui.closeButton, SIGNAL(clicked()),
            this, SLOT(close()));
}

void FindDialog::findClicked()
{
    QString text = ui.lineEdit->text();
    Qt::CaseSensitivity cs =
        ui.caseCheckBox->isChecked() ? Qt::CaseSensitive
                                     : Qt::CaseInsensitive;
    if (ui.backwardCheckBox->isChecked()) {
        emit findPrevious(text, cs);
    } else {
        emit findNext(text, cs);
    }
}

void FindDialog::enableFindButton(const QString &text)
{
    ui.findButton->setEnabled(!text.isEmpty());
}

```